

A12

L2 ANSWER 1 OF 1 DGENE (C) 2002 THOMSON DERWENT

Full Text

AN **AAZ09683** DNA DGENE  
TI New carboxylesterase polypeptide for treatment of tumors -  
IN Danks M K; Potter P M; Houghton P J  
PA (SJUD-N) ST JUDE CHILDREN'S RES HOSPITAL.  
PI WO---9942593 A1 19990826 70p  
AI 1999WO-US03171 19990212  
PRAI 1998US-0075258 19980219  
PSL Claim 2; Fig 4  
DED 16 NOV 1999 (first entry)  
DT Patent  
LA English  
OS 1999-540311 [45]  
CR P-PSDB: AAY33145  
DESC Rabbit liver carboxylesterase DNA.  
KW Carboxylesterase; rabbit; liver; tumour cell; chemotherapy; prodrug;  
disease-specific responsive promoter; CRT-11; APC; resection; recurrence;  
inhibition; bone marrow cell; ss.  
ORGN Oryctolagus cuniculus.  
AB This invention describes a novel rabbit carboxylesterase polypeptide (I)  
capable of metabolizing a chemotherapeutic prodrug and its inactive  
metabolites into an active drug. The invention also describes a  
composition comprising (I) and a disease-specific responsive promoter.  
This composition is useful for sensitizing tumor cells to a  
chemotherapeutic prodrug (preferably CRT-11 or APC) by transfecting into  
tumor cells, and contacting the sensitized cells with a chemotherapeutic  
prodrug to inhibit growth of the tumor cells. The composition can also be  
administered to the site of tumor resection to inhibit tumor recurrence,  
and be administered to bone marrow cells to remove tumor cells. The  
products of the invention are useful for identifying drugs that are  
inactivated by a carboxylesterase enzyme, and are also useful for  
identifying compounds containing a COOC ester linkage that are activated  
by a carboxylesterase enzyme. This sequence encodes a rabbit liver  
carboxylesterase which is described in the method of the invention.  
NA 431 A; 438 C; 462 G; 386 T; 0 other  
SQL 1717  
SEQ

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1 gaattctgcc atgtggctct gtgcattggc cctggcctct ctgcgcgctt
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201 ggtttgcacc accacagcct gcagaatcat tgagccacgt gaagaacacc
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301 ctgggagctc ttcaccaaca gaaaagagaa catccctctt aagttttctg
351 aagactgcct ttacctgaat atttacaccc ctgctgacct gacaaagaga
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1051 gggaatcaac cagcaagagt ttggctggat tatcccaatg caaatgctgg
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1 gaattctgcc atgtggctct gtgcattggc cctggcctct ctgcgcgctt
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1051 gggaaatcaac cagcaagagt ttggctggat tatcccaatg caaatgctgg
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1251 acttggtcct ggacatgctt gcagatttgt tatttggtgt cccatctgtg
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FEATURE TABLE:

Key	Location	Qualifier	
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		transl_except	(pos:230..232, aa:Trp)
		product	"carboxylesterase"